

REMARKS

This application has been amended in a manner that is believed to place it in condition for allowance at the time of the next Official Action.

Claims 15, 18-20 and 23-27 are pending in the application. New claim 27 has been added. New claim 27 is directed to the cycloviolacin O2. Support for this recitation may be found in claim 24 and in the present specification at page 3, lines 25-30.

In the outstanding Official Action, claims 15-20 and 26 were rejected under 35 USC 112, first paragraph, for allegedly failing to satisfy the written description requirement. This rejection is traversed.

In imposing the rejection, the outstanding Official Action alleged that the specification does not clearly define or provide samples of what qualifies as cyclotides. In particular, the Official Action states that "the possible structural variations are limitless to any class of peptide or a peptide-like molecule that can form a cyclic peptide".

However, applicants note that independent claim 15 recites that the cyclotide has the amino acid sequence selected from the group consisting of SEQ ID NO: 3, SEQ ID NO: 4, and SEQ ID NO: 5. The recitation that the cyclotide is selected from the group consisting of SEQ ID NO: 3, SEQ ID NO: 4, and SEQ ID NO: 5

was previously recited in claim 21. As the Examiner is aware, claim 21 was not subject to the written description rejection.

In addition, claim 23 continues to recite the specific cyclotides set forth in the Markush group recited in the claim. Claim 23 was also found to satisfy the written description requirement.

In view of the above, applicants respectfully request that the rejection be withdrawn.

Claims 15-25 were rejected under 35 USC 112, second paragraph, for allegedly being indefinite.

The outstanding Official Action alleged that it is unclear what is meant by "biological fouling". However, the claims have been amended to recite "marine fouling". As to the term "fouling", applicants believe that the definition and usage of the term in the specification shows that the term "fouling" is known and would be understood by one skilled in the art.

Applicants respectfully submit that claims 16-18 have been amended to obviate the indefiniteness rejection.

Claims 15-25 were rejected under 35 USC 112, first paragraph, for allegedly introducing new matter into the disclosure. This rejection is traversed.

Applicants respectfully submit that the present application implicitly supports the phrase "biological fouling". Nevertheless, in the interest of advancing prosecution, applicants introduce the phase "marine fouling". The Official

Action acknowledges in Section 22 that the specification recites "marine fouling organisms". In that the specification recites that an embodiment of the invention is to inhibit "marine fouling organisms", applicants respectfully request that the "new matter" rejection be withdrawn.

Claims 15-20 and 26 were rejected under 35 USC 112, first paragraph, for allegedly not satisfying the enablement requirement.

As noted above, claim 15 has been amended to recite that the cyclotide has an amino acid sequence selected from the group consisting of SEQ ID NO: 3, SEQ ID NO: 4, and SEQ ID NO: 5. As noted above, a cyclotide is a defined type of peptide, not a general description of a cyclic peptide. In this regard, applicants respectfully submit that one skilled in the art would readily be able to make and use the recited peptides.

Indeed, the specification teaches that the members of this family exhibit a common structure. In particular, cyclotides have a cyclic cystine knot, an amino acid backbone that is circular, and lack both N- and C-terminals. The cyclotides all contain six cystine residues involved in bridges in a knotted arrangement. The specification goes on to explain that these features in combination with their size provide an excellent stability.

Thus, the present disclosure does provide a structure and function for the recited cyclotides.

Furthermore, the Examiner is respectfully reminded that any cyclotides that do not satisfy the recitations of the claimed method would fall outside the scope of the claimed invention.

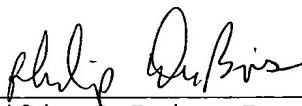
In this regard, applicants respectfully request that the enablement rejection be withdrawn.

Thus, in view of the above, applicants respectfully request that the rejection be withdrawn.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

YOUNG & THOMPSON

  
Philip DuBois, Reg. No. 50,696  
209 Madison Street, Suite 500  
Alexandria, VA 22314  
Telephone (703) 521-2297  
Telefax (703) 685-0573  
(703) 979-4709

PD/fb